What is claimed is:

1. A switch device for rotating and stopping a DC motor, said switch device comprising:

a first switch element having two moving contacts, two normally open NO contacts and two normally closed NC contacts;

a second switch element having at least one normally closed NC contact; and

an operating element for connecting said two moving contacts individually to input terminals of said DC motor, connecting said two NO contacts to a higher voltage source line, connecting each of said two NC contacts of said first switch element to a lower voltage source line at a lower voltage than said higher voltage source line each through one of said at least one NC contact of said second switch element, and maintaining said at least one NC contact of said second switch element in an open condition during a period from when one of said NO contacts begins to change from a closed condition to an open condition until corresponding one of said NC contacts of said first switch element finishes changing from an open condition to a closed condition.

2. The switch device of claim 1 wherein said second switch element has only one normally closed NC contact and said operating element serves to connect each of said two NC contacts of said first switch element to said lower voltage source line through said only one NC contact of said second switch element and to maintain said only one NC contact of said second switch element in an open condition during said period.

3. The switch device of claim 1 wherein said second switch element has two normally closed NC contacts and said operating element serves to connect each of said two NC contacts of said first switch element to said lower voltage source line through corresponding one of said two NC contacts of said second switch element and to maintain both of said two NC contacts of said second switch element in an open condition during said period.

4. A switch device for rotating and stopping a DC motor, said switch device comprising:

a first switch element having two moving contacts, two normally open NO contacts and two normally closed NC contacts;

a second switch element having at least one normally closed NC contact; and

an operating element for connecting said two moving contacts individually to input terminals of said DC motor, connecting said two NC contacts to a lower voltage source line, connecting each of said two NO contacts of said first switch element to a higher voltage source line at a higher voltage than said lower voltage source line through one of said at least one NC contact of said second switch element, and, before either one of said NO contacts of said first switch element changes from a closed condition to an open condition, allowing the one of said at least one normally closed NC contact of said second switch element connected to said one NO contact to be in an open condition.

5. The switch device of claim 4 wherein said second switch element has only one normally closed NC contact and said operating element serves to connect each of said two NC contacts of said first switch element to said higher voltage source line through said only one NC contact of said second switch element and, before either one of said NO contacts of said first switch element changes from a closed condition to an open condition, to allow said only one NC contact of said second switch element to be in an open condition.

6. The switch device of claim 4 wherein said second switch element has only one normally closed NC contact and said operating element serves to connect each of said two NC contacts of said first switch element to said higher voltage source line through corresponding one of said two NC contacts of said second switch element and, before either one of said NO contacts of said first switch element changes from a closed condition to an open condition, to allow the one of said two NC contacts of said second switch element connected to the either one NO contact to be in an open condition.

7. A switch device for rotating and stopping a DC motor, said switch device comprising:

a first switch element having two normally open NO contacts;

a second switch element having two normally closed NC contacts; and

an operating element for connecting two input terminals of said DC motor to a higher voltage line each through a corresponding one of said two NO contacts of said first switch element, connecting said two input terminals of said DC motor to a lower voltage source line at a lower voltage than said higher voltage each through a corresponding one of said two NC contacts of said second switch element, and, before either one of said NO contacts of said first switch element changes from an open condition to a closed condition, allowing the one of said NC contacts of said second switch element connected to said one NO contact to be in an open condition.